Means of matching 2D motion vector fields in a render, match, and refine iterative 3D scene model refinement system so as to attain directed hierarchical convergence and insensitivity to color, lighting, and textures.

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CROSS-REFERENCE TO RELATED APPLICATIONS

[a] The present invention claims priority benefit of United States Provisional Patent Application Serial No. 60/412,005, filed 09/20/2002 (same title as the present application), which is hereby incorporated by reference.

[b] This application is related to co-pending and simultaneously filed United States Patent Application entitled "Means of partitioned matching and selective refinement in a render, match, and refine iterative 3D scene model refinement system through propagation of model element identifiers", which is hereby incorporated by reference.

OTHER REFERENCES

[c] Mark R. Stevens and J. Ross Beveridge, "Interleaving 3D Model Feature Prediction and Matching to Support Multi-Sensor Object Recognition". In Proceedings: Image Understanding Workshop, pages 699–706, Los Altos, CA, February 1996. ARPA, Morgan Kaufmann.

[d] R. Osada, T. Funkhouser, B. Chazelle, D. Dobkin, "Shape Distributions", ACM Transactions on Graphics, 21(4), October, 2002.

CLAIMS

What is claimed is:

1. A method of matching for an RMR based 3D scene model refinement system comprising:

per-frame rendering of a motion vector field given the scene model;